INFORMATION SHEET

ORDER NO. _____
COUNTY OF KERN
FOR CLOSURE AND POST-CLOSURE MAINTENANCE
LOST HILLS SANITARY LANDFILL
KERN COUNTY

The County of Kern owns and maintains the Lost Hills Sanitary Landfill, located approximately four miles west of Lost Hills. The 537-acre facility contains one unlined waste management unit (Unit) covering 6.7 acres and is currently regulated by Waste Discharge Requirements Order No. 5-01-161.

The site is near the western edge of the San Joaquin Valley. The climate is semi-arid, with hot, dry summers and cool winters. The average annual precipitation is 5.74 inches of precipitation per year and the annual average reference evapotransporation from a grass surface is 57.06 inches per year. The site is not within a 100-year floodplain according to FEMA maps.

The San Andreas Fault Zone is located approximately 22 miles west of the landfill. The magnitude of the maximum probable earthquake is 8.25. The peak horizontal ground acceleration at the site would be 0.234g.

Land within 1,000 feet of the site is used for grazing and mining. First encountered groundwater occurs in a perched groundwater-bearing zone at a depth of approximately 263 to 265 feet below the native ground surface. The groundwater elevation in the perched groundwater-bearing zone ranges from approximately 536 feet to 539 feet MSL. Only one well is completed in the perched groundwater-bearing zone, preventing calculation of groundwater gradient and flow direction. The perched groundwater-bearing zone has not been identified beneath the Unit.

Surface drainage is toward an unnamed ephemeral creek in the Lost Hills in the Antelope Plain Hydrologic Area (558.60) of the Tulare Lake Basin. Surface waters in the Antelope Plain Hydrologic Area are designated as Valley Floor Waters in the Basin Plan.

The first encountered groundwater is about 100 to 105 feet below the native ground surface. Groundwater elevations range from 314 feet to 315 feet MSL. The groundwater is unconfined. The depth to groundwater does not fluctuate significantly on a seasonal basis. Monitoring data indicates background groundwater quality has an electrical conductivity ranging between 4,500 and 6,000 micromhos/cm, with total dissolved solids ranging between 3,300 and 4,000 mg/l.

Volatile organic compounds are often detected in a release from a landfill, and are the primary waste constituents detected in groundwater beneath a municipal solid waste landfill. Since volatile organic compounds are not naturally occurring, and thus have no background value, they are not amenable to the statistical analysis procedures contained in Title 27 for the determination of a release of wastes from a Unit. Title 27 does provide for the non-statistical evaluation of monitoring data that will provide the best assurance of the earliest possible detection of a release from a Unit. However, Title 27 does not specify a specific method for non-statistical evaluation of monitoring data.

A Regional Water Board may specify a non-statistical data analysis method pursuant to Section 20080(a)(1) of Title 27. In order to provide the best assurance of the earliest possible detection of a release of non-naturally occurring waste constituents from a Unit, this Order specifies a non-statistical method for the evaluation of monitoring data.

The specified non-statistical method for evaluation of monitoring data in this Order provides two criteria (or triggers) for making the determination that there has been a release of waste constituents from a Unit. The presence of two waste constituents above their respective method detection limit (MDL), or one waste constituent detected above its practical quantitation limit (PQL), indicates that a release of waste from a Unit has occurred. Following an indication of a release, verification testing will be conducted to determine whether there has been a release from the Unit, or there is a source of the detected constituents other than the landfill, or the detection was a false detection. Although the detection of one waste constituent above its MDL is sufficient to provide for the earliest possible detection of a release in accordance with Title 27, the detection of two waste constituents above the MDL as a trigger is appropriate due to the higher risk of false-positive analytical results and the corresponding increase in sampling and analytical expenses from the use of detecting one waste constituent above its MDL as a trigger.

The Discharger adequately demonstrated that construction of a Title 27 prescriptive standard cover would be unreasonable and unnecessarily burdensome when compared to the proposed engineered alternative design. There is no clay source on-site or nearby and the cost of importing clay from off-site or mixing on-site soils with bentonite would cost substantially more than the alternative design. The Discharger demonstrated that an evapo-transpirative cover utilizing soil from a nearby borrow source would be an appropriate engineered alternative to the prescriptive design. This Order requires the Discharger to install a pan lysimeter(s) beneath the final cover for long-term monitoring of the cover integrity.

On 9 October 1991, the United States Environmental Protection Agency (USEPA) promulgated regulations (Title 40, Code of Federal Regulations, Parts 257 and 258, “federal municipal solid waste [MSW] regulations” or “Subtitle D”) that apply, in California, to dischargers who own or operate Class II or Class III landfill units at which municipal solid waste is discharged. The majority of the federal MSW regulations became effective on the “Federal Deadline”, which was on 9 October 1993. With the issuance of Resolution No. 93-62, the State Water Resources Control Board established a statewide policy for the regulation of discharges of municipal solid wastes consistent with Subtitle D. Following the issuance of Resolution No. 93-62, the USEPA deemed the State of California to be an approved state, meaning that compliance with the applicable state regulations constitutes compliance with the corresponding portions of the federal Subtitle D regulations. These requirements are consistent with Resolution No. 93-62 and Subtitle D, and implement the appropriate state regulations in lieu of Subtitle D. The Discharger also needs to comply with all applicable provisions of Subtitle D that are not implemented through compliance with this Order or Title 27.

The action to revise waste discharge requirements for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resource Code §21000, et seq., and the

CEQA guidelines, in accordance with Title 14, CCR, §15301. Revision of the waste discharge requirements updates the requirements to conform with the California Water Code and Title 27, California Code of Regulations, §20005 et seq.

REH/fmc: 4/7/06